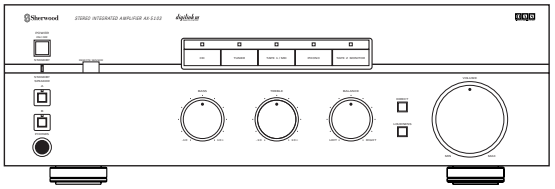
OPERATING INSTRUCTIONS
BEDIENUNGSANLEITUNG
ISTRUZIONI PER L'USO
MANUAL DE INSTRUCCIONES



AX-5103

Stereo Integrated Amplifier
Stereo-Vollverstärker
Amplificatore Integrato Stereo
Amplificador Integrado Estéreo

Sherwood

CE

ENGLISH

Congratulations on Your Purchase!

Your new high fidelity Amplifier is designed to deliver maximum enjoyment and years of trouble free service. Please take a few moments to read this manual thoroughly. It will explain the features and operation of your unit and help ensure a trouble free installation.

Please unpack your unit carefully. We recommend that you save the carton and packing material. They will be helpful if you ever need to move your unit and may be required if you ever need to return it for service. Your unit is designed to be placed in a horizontal position and it is important to allow at least two inches of space behind your unit for adequate ventilation and cabling convenience.

To avoid damage, never place the unit near radiators, in front of heating vents, in direct sunlight, or in excessively humid or dusty location.

Connect your complementary components as illustrated in the following section.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

Caution : Do not block ventilation openings

FOR U.S.A.

■FCC INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void

Caution regarding placement (Except for U.S.A. and Canada)

To maintain proper ventilation, be sure to leave a space around the unit (from the largest outer dimensions including projections) equal to, or greater than, shown below.

Left and right panels : 5 cm
Rear panel : 10 cm
Top panel : 20 cm

FOR U.S.A AND CANADA ..... 120 V

FOR YOUR SAFETY

Units shipped to the U.S.A and Canada are designed for operation on 120 Volts AC only.

Observe all safety precaution for use of a polarized AC plug. However, some products may be supplied with a non polarized plug.

CAUTION : To prevent electric shock, match wide

FOR EUROPE AND AUSTRALIA ..... 230 V/240 V

FOR YOUR SAFETY

Units shipped to Australia are designed for operation on 240 V AC only.
To ensure safe operation, the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring. Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth.
Improper extension cords are a major cause of fatalities. The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe.
For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.

PAN-EUROPEAN UNIFIED VOLTAGE
All units are suitable for use on supplies 230-240 V AC.

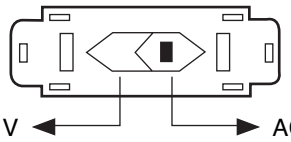
FOR OTHER COUNTRIES ..... 115 V/ 230 V

FOR YOUR SAFETY

Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

AC VOLTAGE SELECTION
This unit operates on 115/230 V AC. The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

AC voltage selector switch



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

ENGLISH

Introduction
• UNPACKING AND INSTALLATION 2
• READ THIS BEFORE OPERATING YOUR UNIT 3

System Connections 5

Front Panel Controls 7

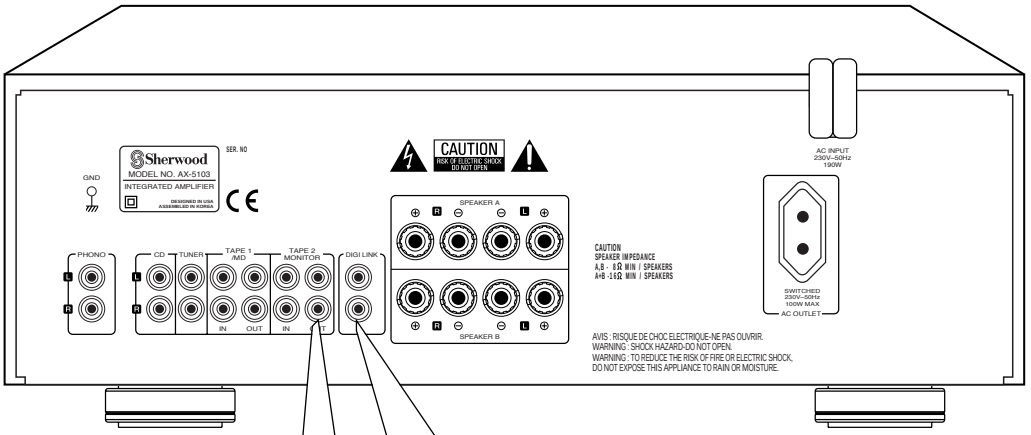
DIGI LINK III System Remote Controls 8
• REMOTE CONTROL OPERATION RANGE 9
• LOADING BATTERIES 9

Operations
• LISTENING TO A PROGRAM SOURCE 10
• RECORDING 12

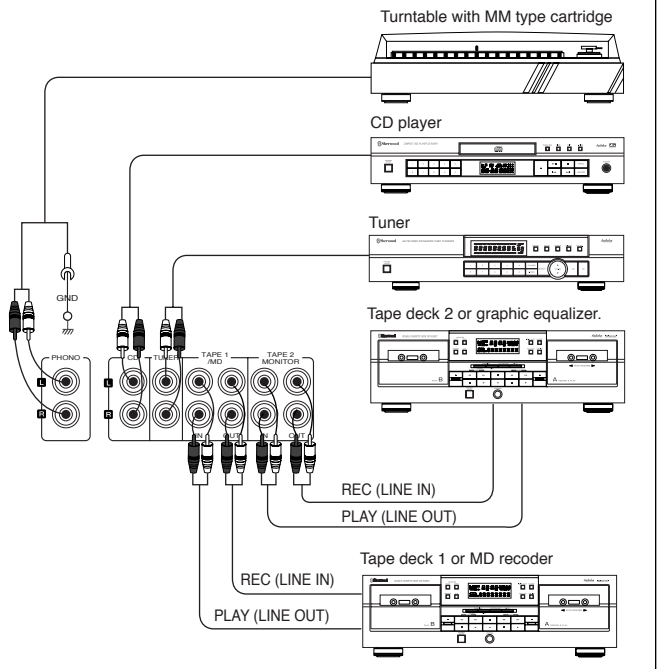
Troubleshooting Guide 13

Specifications 14

- Do not connect the amplifier to the wall AC outlet when plugging and unplugging connection cords.
- Be sure to connect the white RCA pin cords to the L (left) and the red RCA pin cords to the R (right) jacks when making connections.
- Make connections firmly and correctly. If not, it can cause loss of sound, noise or damage to the amplifier.

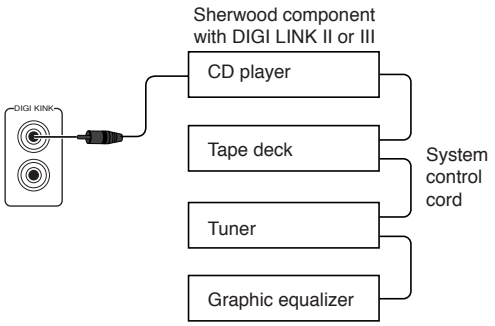


■CONNECTING AUDIO COMPONENTS

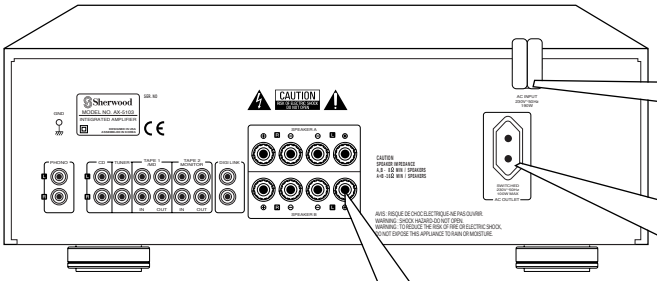


- The TAPE1/MD IN/OUT jacks may also be connected to the LINE OUT/IN jacks of an additional MD recorder.
- The TAPE2 MONITOR IN/OUT jacks may also be connected to the LINE OUT/IN jacks of an optional graphic equalizer.

■CONNECTING SYSTEM CONTROL



- Connect this jack to the DIGI LINK jack of the external Sherwood component that uses the DIGI LINK II or III remote control system.



■ AC INPUT CORD

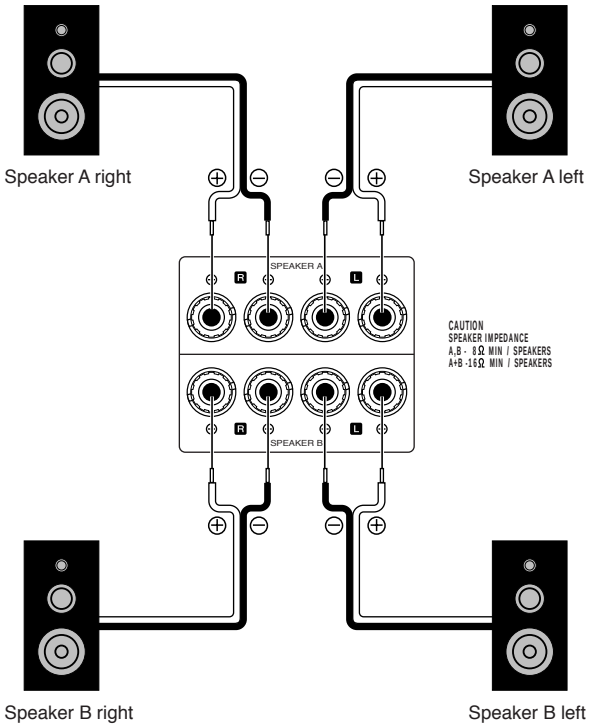
Plug this cord into a wall AC outlet

■ SWITCHED AC OUTLET

- This outlet is switched on (power on mode) and off (standby mode) according to power control as follows ; (Maximum total capacity is 100 W)

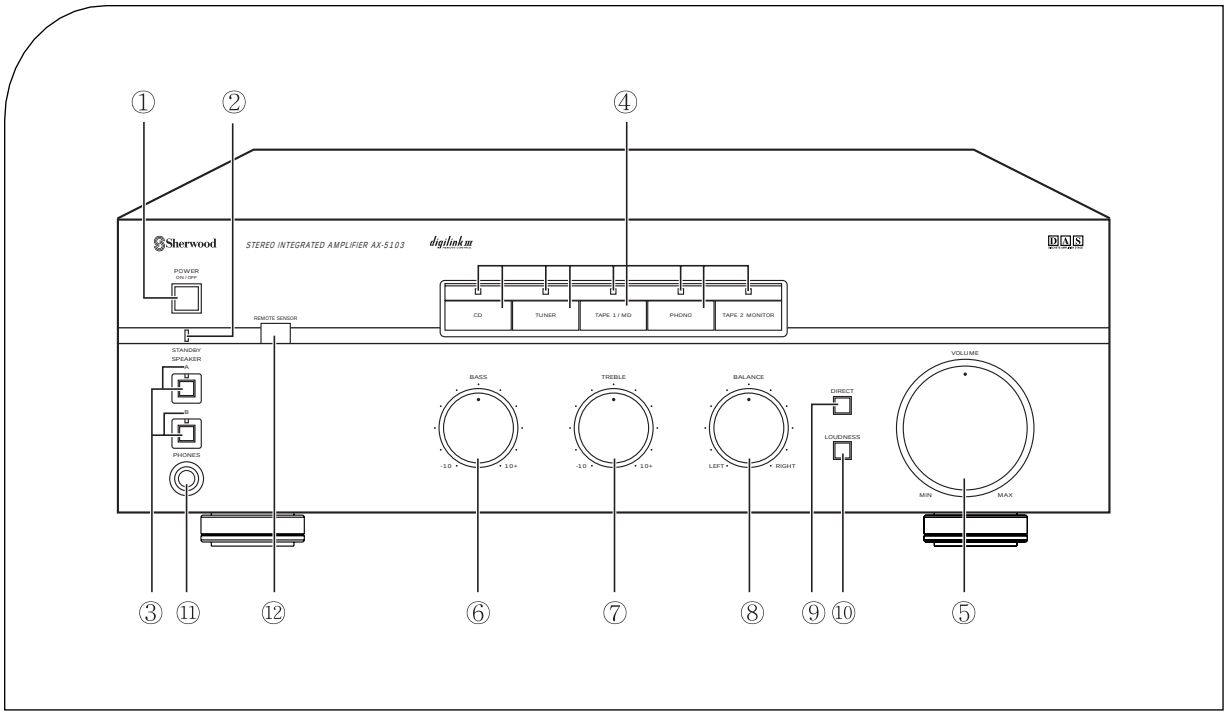
Standby mode - switched AC outlet off
Power on mode - switched AC outlet on

■ CONNECTING SPEAKERS



- This amplifier enables you to listen to two pairs of speakers individually or in various combinations.
  Connect your main speakers to the SPEAKER A terminals and use the SPEAKER B terminals for the remote pair located elsewhere in your home.
- Never short circuit the + and - speaker cords.
- Be sure to connect speakers firmly and correctly according to the channel (left and right) and the polarity (+ and -).

Note : For safe amplifier operation, use the speakers with impedance of over 8Ω when you use either SPEAKER A or B terminals and use the speakers with impedance of over 16Ω when you use both SPEAKER A and B terminals.



① **POWER SWITCH**
Press this switch to enter the power off or the standby mode.

② **STANDBY INDICATOR**
In the standby mode, this indicator lights up.

③ **SPEAKER SELECTOR A, B BUTTONS/ INDICATORS**
Press the button to switch the desired speakers on or off.

④ **INPUT SELECTOR BUTTONS/INDICATORS**
Press the button to select the desired input source.
- When the TAPE 2 MONITOR indicator lights up, other inputs cannot be heard from the speakers.
  To listen to a input source other than TAPE 2 MONITOR, be sure to set the TAPE 2 MONITOR button to off.

⑤ **VOLUME CONTROL KNOB**
Adjust the volume to a comfortable listening level.

⑥ **BASS CONTROL KNOB**
Adjust the low-frequency tone.
- The center position is the flat (normal) condition.

⑦ **TREBLE CONTROL KNOB**
Adjust the high-frequency tone.
- The center position is the flat (normal) condition.

⑧ **BALANCE CONTROL KNOB**
Adjust the stereo balance between left and right speakers.
- The center position is the normal condition.

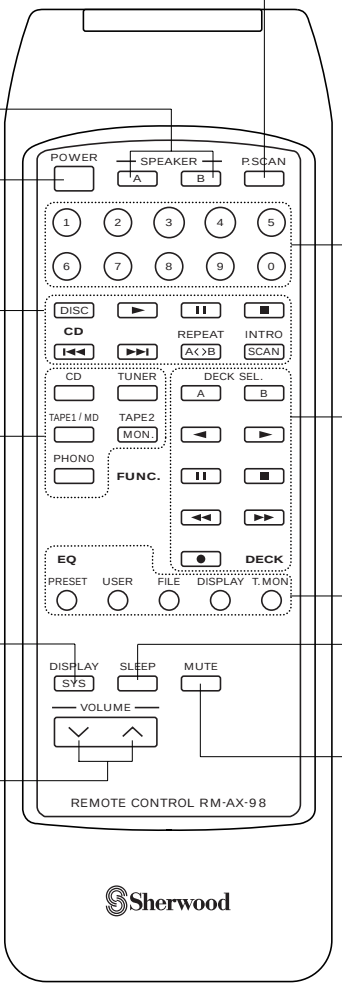
⑨ **TONE DIRECT SWITCH**
Press this switch to bypass the tone (bass and treble) circuitry for pure sound.

⑩ **LOUDNESS SWITCH**
Press this switch to emphasize the sound of frequencies that are difficult to hear at low volume levels.
- The frequency emphasis varies according to the volume level at which you are listening.

⑪ **HEADPHONE JACK**
Stereo headphones with a standard 1/4 inch plug can be plugged into this jack for private listening.
- When listening with headphones, turn off both SPEAKER SELECTOR A and B buttons.

⑫ **REMOTE SENSOR**
This receives the signals from the system remote control unit.

- You can remotely control not only this amplifier but also Sherwood compatible components bearing the DIGI LINK II or III logo.
- For system remote control operation, first make the DIGI LINK connections.



PRESET SCAN BUTTON
For scanning preset stations in sequence in tuner mode.

NUMERIC BUTTONS
For selecting preset stations in tuner mode.
For selecting a track or a disc in CD mode.
When selecting a disc, select disc No.(1~5) within 2 sec. after pressing the DISC button.

SPEAKER SELECTOR
A, B BUTTONS

POWER BUTTON
In the standby mode, press this button to enter the operating or the standby mode.

■TAPE DECK SECTION

DECK SELECTOR A, B - for selecting deck A or B
◄ , ► - to begin reverse or forward side playback.
II - to pausing playback or recording.
■ - to stop playback or recording.
◄◄ , ►► - to wind tape reverse or forward.
● - for recording.

■CD PLAYER SECTION

DISC (CD changer only)-for disc selection
► - to begin play.
II - to pausing play.
■ - to stop play or to clear a program.
I◄◄, ►►I - for skipping backward or forward.
REPEAT A< >B - to play a specific passage repeatedly.
INTRO SCAN - to preview each track only for 10 sec.

■EQUALIZER SECTION

PRESET - for selecting equalizer pattern.
USER - for adjusting equalizer pattern as desired.
FILE - for selecting desired equalizer pattern in the preset or in the user mode.
DISPLAY - for selecting equalizer display.
T.MON - for monitoring the sound of recording or playback on tape deck.

INPUT SELECTOR BUTTONS

SYSTEM DISPLAY BUTTON
Each time this button is pressed, the brightness of all fluorescent displays of Sherwood components connected by the DIGI LINK III changes together as follows;
→ ON → dim → OFF

- In the display OFF mode, pressing any button will restore the display ON mode.

SLEEP BUTTON
When the Sherwood components (including tuner such as TX-5090C) are made DIGI LINK III connections, the sleep timer of Sherwood tuner allows the system to continue operating for a specified period of time before automatically shutting off.
- Each time this button is pressed, the sleep time on Sherwood tuner changes as follows;
→10 →20 →30 →60 →90 →OFF
Unit : minutes
- When the sleep time is selected, all display panels of the system are dimly lit.

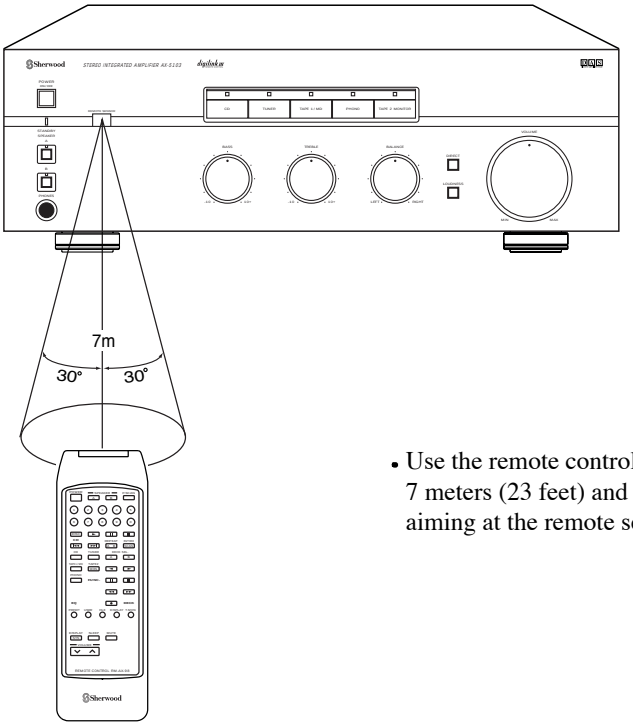
VOLUME UP/DOWN(∧ / ∨) BUTTONS

MUTE BUTTON
Press this button to temporarily mute the sound.
Press again to resume the previous sound level.

- In the DIGI LINK III remote control system, if pressing PLAY, etc. on CD player or tape deck, CD or TAPE 2 MONITOR is selected automatically without selecting the input source and then PLAY, etc. starts.

Notes :

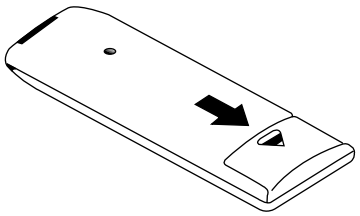
- Some functions for CD player, tape deck or equalizer may not be available.
- For details about functions, refer to the operating instructions of each component.



- Use the remote control unit within a range of about 7 meters (23 feet) and angles of up to 30 degrees aiming at the remote sensor.

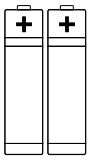
1

Remove the cover.

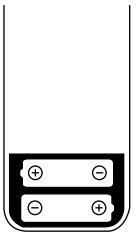


2

Load two batteries matching the polarity.



2 × 1.5V
R6/SUM-3/AA

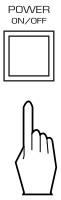


- Remove the batteries when they are not used for a long time.
- Do not use the rechargeable batteries (Ni-Cd type).

ENGLISH

Before operation

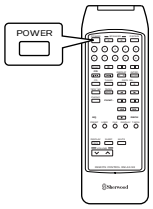
• Enter the standby mode.



• The STANDBY indicator lights up.
This means that the amplifier is not disconnected from the AC mains and a small amount of current is retained to support the memorized contents and operation readiness.
• To switch the power off, push the POWER switch again, then the power is cut off and the STANDBY indicator goes off.

1

In the standby mode, turn the power on.



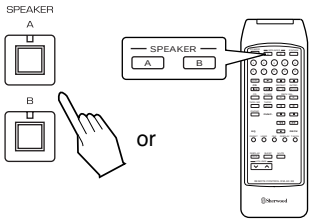
• Each time the POWER button on the remote control is pressed, the amplifier is turned on to enter the operating mode or off to enter the standby mode.
• In the standby mode, if the INPUT SELECTOR button is pressed, the amplifier is turned on automatically and the desired input is selected.

■SYSTEM POWER ON/OFF

• If the POWER switch of Sherwood component connected by the DIGI LINK II or III is kept pushed and its AC input cord is plugged in the switched AC outlet, each time the amplifier becomes the standby or the operating mode, its power is turned off or on.
• Under the same conditions, if its AC input cord is not plugged only in the switched AC outlet, when the amplifier becomes the standby mode, only its display is off (meaning that a small amount of current is retained for operation readiness, etc.)

2

Switch the desired speakers on.

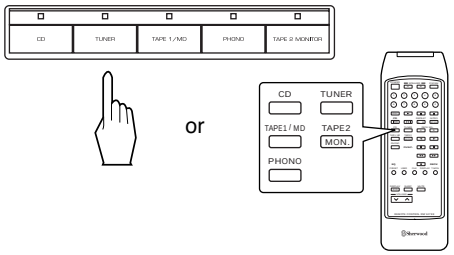


• Then the corresponding SPEAKER indicator lights up and the sound can be heard the speakers connected to "SPEAKER A" or (and) "SPEAKER B" terminals.
• When using headphones for private listening, press both SPEAKER SELECTOR A and B buttons to switch the speakers off.

Note : For safe amplifier operation, be sure to check impedance of the speakers connected. (Refer to “CONNECTING SPEAKERS” on page 6)

3

Select the desired input source.



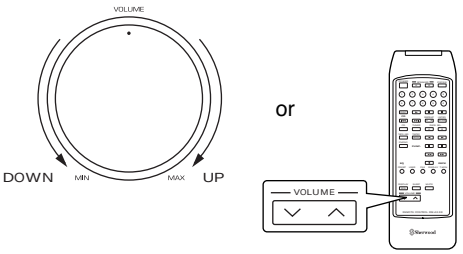
• Then the corresponding indicator lights up.
• When the TAPE 2 MONITOR button is set to on so that the TAPE 2 MONITOR indicator lights up, other inputs can not be heard from the speakers.
To listen to a input source other than TAPE 2 MONITOR, be sure to set the TAPE 2 MONITOR button to off.

TAPE MONITOR function

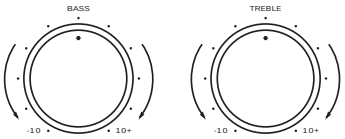
You can connect either a tape deck or a graphic equalizer to the amplifier’s TAPE 2 MONITOR jacks.
Only when you listen to the component connected to these jacks, set the TAPE 2 MONITOR button to on.
If you connect a 3-head tape deck, you can listen to the sound being recorded during recording, not the source sound.
For further details, refer to the operating instructions of the component connected.

4 Operate the selected component for playback.

5 Adjust the volume to a comfortable listening level.

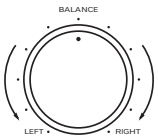


6 Adjust the tone (bass and treble).

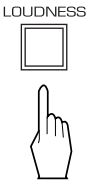


Note : Extreme settings at high volume may damage your speakers.

7 Adjust the stereo balance between left and right speakers.

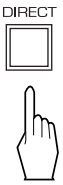


8 To emphasize the sound of frequencies that are difficult to hear at low volume levels.



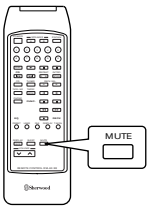
- To cancel the loudness effect, press this switch again.

9 To listen to a program source without the tone effect.



- You can listen to pure sound that bypasses the tone circuitry.
- To cancel the tone direct function, press this switch again.

To mute the sound temporarily.



- To resume the previous sound level, press this button again.

To listen with the headphones

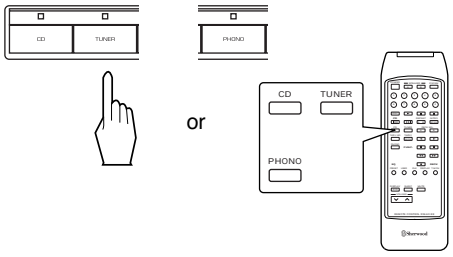
- Ensure that both SPEAKER SELECTOR A and B buttons are set to off.

ENGLISH

• The volume and tone (bass, treble) settings, etc. have no effect on the recording signals.

Recording with TAPE 1/MD

1 Select the desired input as recording source except for TAPE 1/MD and TAPE 2 MONITOR.



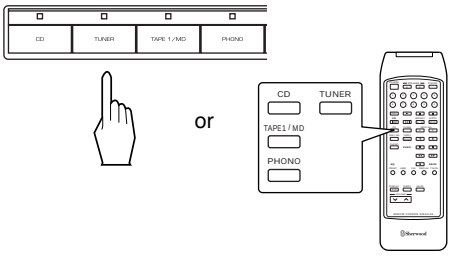
• Be sure that the TAPE 2 MONITOR indicator goes off.

2 Start recording on the tape deck or the MD recorder connected to TAPE 1/MD.

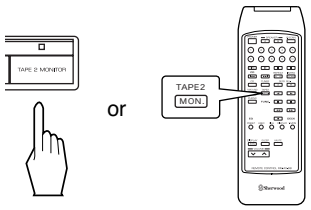
3 Start play on the desired input.

Recording with TAPE 2 MONITOR

1 Select the desired input as recording source except for TAPE 2 MONITOR.



2 Set the TAPE 2 MONITOR button to on.



3 Stat recording on the tape deck connected to TAPE 2 MONITOR.

4 Start play on the desired input.

• When the TAPE 1/MD is selected as recording sources, dubbing will start from TAPE 1/MD to TAPE 2 MONITOR.
• It is not possible to dub from TAPE 2 MONITOR to TAPE 1/MD.
• For tape monitor function, refer to "TAPE MONITOR function" on page 10.

If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or our service organization.

PROBLEM	POSSIBLE CAUSE	REMEDY
No power	• The AC input cord is disconnected • Poor connection at AC wall outlet or the outlet is inactive.	• Connect the cord securely. • Check the outlet using a lamp or another appliance.
No sound	• Speaker cords are disconnected. • Both SPEAKER SELECTOR A and B buttons are set to off. • The volume is adjusted too low. • The MUTE button on the remote control is pressed to ON. • Incorrect selection of input source. • Incorrect connections between the components.	• Check the speaker connections. • Switch the desired speakers on. • Adjust the volume. • Press the MUTE button to cancel the muting effect. • Select the desired input source correctly. • Make connections correctly.
No recording	• Incorrect connections. • Incorrect operation of the tape deck (or MD recorder).	• Make connections correctly. • Operate the tape deck (or MD recorder) correctly.

ENGLISH

- Power output, 8 Ω, THD 0.3 %, 40 Hz ~ 20 kHz ..... 2 × 100 W
- Total harmonic distortion, 8 Ω, 100 W, 1 kHz ..... 0.03 %
- Intermodulation distortion
  60 Hz : 7 kHz = 4 : 1 SMPTE, 8 Ω, 100 W ..... 0.05 %
- Input sensitivity, 47 kΩ
  PHONO (MM) ..... 3.0 mV
  CD, TUNER, TAPE ..... 200 mV
- Phono input overload, THD 0.5 %, 1 kHz ..... 200 mV
- Signal to noise ratio, unweighted
  PHONO (MM) ..... 75 dB
  CD, TUNER, TAPE ..... 90 dB
- Frequency response
  PHONO (MM), RIAA, 40 Hz ~ 20 kHz ..... ± 1 dB
  CD, TUNER, TAPE, 10 Hz ~ 60 kHz ..... + 0 dB, - 2 dB
- Crosstalk, 1 kHz, 50 W
  TAPE to CD ..... 70 dB
  CD to TAPE ..... 70 dB
- Bass/Treble control, 100 Hz/10 kHz ..... ± 10 dB
- Loudness contour, 100 Hz/10 kHz ..... + 6 dB / + 3dB

■GENERAL

- Power supply ..... AC 230 V, 50 Hz
- Power consumption ..... 190 W
- AC outlets
  Switched ..... 100 W
- Dimensions (W × H × D) ..... 440 × 145 × 360 mm
  (17-3/8 × 5-3/4 × 14-1/8 inches)
- Weight (Net) ..... 8.75 kg (19.3 lbs)

Note : Design and specifications are subject to change without notice for improvements.

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